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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,568	12/10/2001	Koichi Hagiwara	Q67594	3469

7590 05/23/2006
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
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Washington, DC 20037

EXAMINER

KIM, CHRISTOPHER S

ART UNIT PAPER NUMBER

3752

DATE MAILED: 05/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/006,568	Applicant(s) HAGIWARA ET AL.	
	Examiner Christopher S. Kim	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-8,14 and 15 is/are pending in the application.
 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,14 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The response filed March 10, 2006 is acknowledged.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claim 8 remains withdrawn.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 5 recites the limitation "a sucked gas supply passage for connecting said powder and granular material tank to said injection nozzle" in lines 10-11. The specification discloses a hose 18 and a pressurized gas source 3. There does not appear to be a disclosure of a "sucked gas supply passage."

6. Claims 5-7, 14 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "a sucked gas supply passage for connecting said powder and granular material tank to said injection nozzle" in lines 10-11. It is uncertain what passage is being claimed. The specification discloses a hose 18 and a pressurized gas source 3. There does not appear to be a disclosure of a "sucked gas supply passage."

Claim 6 recites "...based on a of said sensor..." in line 18. This is grammatically incorrect.

Claim 7 recites the functional limitation "...and supply and stop of powder and granular material is controlled by said controller based on the supply and stop of the pressurized liquid detected by said sensor." Applicant discloses that driving motor 11 and feeding device 7 are controlled by a controller 13. See specification, paragraph 9. Applicant further discloses that based on sensor 20, controller 13 controls drive motor 11. There is a structural gap in the claimed invention to accomplish the claimed functional limitation, i.e. the driving motor 11 and/or feeding device 7.

Claim 14 recites the limitation "a switching valve" in line 2. This appears to be a double inclusion of the "switching valve" recited in claim 6.

Claim Rejections - 35 USC § 102

7. Claims 1, 3, 4, 5, 6, 7 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Woodward (5,312,040).

Woodward discloses a cleaning and releasing device comprising: an injection nozzle 38; a pressurized liquid flow passage 32; a pressurized gas flow passage 62; operating means 36; detecting means 12; a hand valve 102; a switching valve 14; a controller 26, 28; powder and granular supply means 16.

Regarding claims 6 and 7, Woodward discloses a cleaning and releasing device comprising: a liquid tank (tank from which pump 36 draws fluid); a pump 36; a liquid supply passage (passage between tank and pump 36); an injection nozzle 38; a pressurized liquid flow passage 32; a pressurized gas source 61; a pressurized gas flow passage 62; a sensor 12; an operating portion 102; a controller 26, 28; a powder and granular material tank 16.

Response to Arguments

8. Applicant's arguments filed March 10, 2006 have been fully considered but they are not persuasive.

Applicant argues the rejection under 35 U.S.C. 112, second paragraph for the structural gap in claims 6 and 7. Applicant has amended claim 6 and therefore renders the argument moot. Regarding claim 7, while it is correct that the claim does not require recitation of all the elements disclosed in the non-limiting embodiments, claim 7 recites a functional limitation with no corresponding structural element. The functional

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recitation is not commensurate in scope with the structural elements claimed, i.e., the structural elements of claim 7 and its parent claim 6 cannot perform the functional limitation recited in claim 7.

Applicant argues that Woodward does not disclose mixing a pressurized liquid and a pressurized gas. Applicant further argues that Woodward does not contemplate a flow pressure of less than 1,000 psi without actuating trigger 102. Even if Woodward does not contemplate a flow pressure of less than 1,000 psi without actuating trigger 102, based on the operating parameters disclosed by Woodward, such a possibility does exist. Additionally, applicant has not positively claimed mixing with the injection nozzle. For example, claim 1 merely hints mixing pressurized liquid and gas by reciting the intended use of the injection nozzle. Finally, claim 1 does not require mixing within the injection nozzle. Even if the gas of Woodward is released only when liquid flows through dump 120, the spray 33 would mix with spray 60 outside the spray gun.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

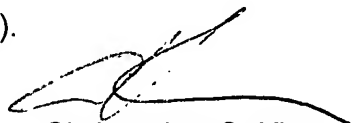
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (571) 272-4905. The examiner can normally be reached on Monday - Thursday, 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Scherbel can be reached on (571) 272-4919. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher S. Kim
Primary Examiner
Art Unit 3752

CK